

NEW FOREST
RURAL SANITARY AUTHORITY.

ANNUAL REPORT

ON

Vital Statistics and Sanitary Condition

OF THE

New Forest Rural Sanitary District,

FOR THE YEAR 1900.

SUBMITTED TO THE RURAL SANITARY AUTHORITY

BY

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SANITARY AUTHORITY.



*To the Councillors of the Hampshire County Council and
New Forest District Council.*



BY THE ORDER OF THE LOCAL GOVERNMENT BOARD,
dated March 23rd, 1891, Article 18, Section 14, it is prescribed that
the Medical Officer of Health shall “ Prepare an Annual Report, to
“ be made to the end of December of each year, comprising a
“ summary of the action taken during the year for preventing the
“ spread of disease, and an account of the Sanitary state of his
“ district generally at the end of the year. The report shall also
“ contain an account of the enquiries which he has made as to
“ conditions injurious to health existing in his district and of the
“ proceedings in which he has taken part or advised, under the
“ PUBLIC HEALTH ACT, 1875, so far as such proceedings relate to
“ those conditions ; and also an account of the supervision exercised
“ by him, or on his advice, for Sanitary purposes over places and
“ houses that the SANITARY AUTHORITIES have power to regulate,
“ with the nature and results of any proceedings which may have
“ been so required and taken in respect of the same during the
“ year. It shall also record the action taken by him, or on his
“ advice, during the year, in regard to offensive trades, and to
“ factories and workshops. The report shall also contain tabular
“ statements (on Forms to be supplied by the LOCAL GOVERNMENT
“ BOARD, or to the like effect) of the sickness and mortality within
“ the district, classified according to diseases, ages, and localities.”

GENTLEMEN,

I have the honour to submit to you my report as Medical Officer of Health to the Rural Sanitary Authority of the New Forest Sanitary District, for the year ending December 31st, 1900 ; together with the tables and statistics required by the Local Government Board.

In former years I have contented myself in giving a summary in a concise manner of the work done by your Medical Officer and Sanitary Inspector ; but as there are other Boards who are equally interested in the Sanitary condition of this District, and with probably a limited idea of the locality, it is only right that I should give a more extended description of the District and more detail as to the Sanitary work performed during the year.

The New Forest Sanitary District is divided for Registration purposes into three Divisions, namely, Eling, Lyndhurst, and Fawley. These Divisions are again sub-divided into 14 separate parishes, one parish giving a third to each Division.

These fourteen parishes are distributed in the following manner :—

Eling Division—

- (1) Ecclesiastical District of Eling which embraces Totton.
- (2) Marchwood.
- (3) Colbury.
- (4) Netley.
- (5) Copythorne.
- (6) Part of Denny Lodge.

Lyndhurst Division—

- (1) Ecclesiastical District of Lyndhurst.
- (2) Bramshaw and Bramshaw East.
- (3) Minstead.
- (4) Part of Denny Lodge.

Fawley Division—

- (1) Ecclesiastical District of Fawley.
- (2) Beaulieu.
- (3) Exbury.
- (4) Hythe and Dibden.
- (5) Part of Denny Lodge.

These three Divisions constitute the whole Sanitary District and cover an area of 64,272 acres with a total population in the census of 1891 of 13,907, giving a density of population of a decimal proportion of a person to each acre, namely, .22. The number of houses in the whole Sanitary District at the census of 1891 amounted to 1329, and with a total population of 13,907, it would give an average of 4.9 to each house. Of course this number to each house, although being small, cannot be looked upon as being correct only from a statistical point of view, as there are several public institutions in the District, where as many as 100 persons are located. Therefore taking this into consideration the density of population per house would be smaller than that given. Since the last census, many houses have been erected in the several divisions of the District, and it will be interesting to note the difference after the next census ; and will appear in my Report for 1901.

The number of houses and population for the several Divisions at the census for 1891 :—

	Houses.	Population.
Eling	1329	6409
Lyndhurst	650	3530
Fawley	829	3968

Eling Division—

This Division, prior to 1894, consisted of the Civil parish of Eling and a portion of Denny Lodge Township. In July, 1894, the parish of Eling was divided into five parishes, viz. : Eling proper, Copythorne (formerly North Eling), Netley Marsh, Marchwood and Colbury. The area of the whole division is 18,581 acres, including water and tidal water, with 484 acres of foreshore. Excluding the water and tidal water area, the acreage of this Division amounts to 18,457 acres, with a total population in 1891 of 6,409 ; estimated to the middle of 1900 at 6,760.

Lyndhurst Division—

This Division is made up of Lyndhurst proper, Bramshaw, and Bramshaw East, Minstead, and part of Denny Lodge Township ; and covers an area of 19,987 acres, with a total population in 1891 of 3,530 ; estimated to the middle of 1900 at 3,665.

Fawley Division—

This Division is made up of Fawley, Beaulieu, Exbury, Hythe, and Dibden, and a part of Denny Lodge Township ; and covers an area of 25,828 acres, with a total population in 1891 of 3,968 ; estimated to the middle of 1900 at 4,135. The whole Sanitary District is situated in the South of Hampshire, and bounded on the south and south-west by the entire length of the Southampton Water and a portion of the Solent.

VITAL STATISTICS.

Estimated Population, 1900 : 14,560.

Area, 64,272 acres.

Density of Population, .22 per acre.

DEATHS AND DEATH RATES.

During the year 1900, the total number of deaths for the Sanitary District amounted to 199, which shows a considerable reduction when compared with that of the previous year, when 221 were registered. These 199 deaths are made up from 96 which occurred in the Eling Division ; 54 in Lyndhurst Division ; and 49 in Fawley Division ; and represent a death rate for the whole Sanitary District calculated upon an estimated population of 14,560 of 13.66 per 1000. The death rate for the several Divisions being Eling, 14.20 ; Lyndhurst, 14.73 ; and Fawley, 11.85 per 1000 inhabitants.

The 96 registered in Eling Division include eight which took place at the Workhouse.

The number of deaths of males and females during 1900 may be tabulated as follows :—

				MALES.	FEMALES.	TOTAL.
Eling	...	...	...	56	40	96
Lyndhurst	...	...	...	29	25	54
Fawley	...	...	...	21	28	49
Whole District				106	93	199

DEATHS OF THE QUARTERS :—

			ELING.	LYNDHURST.	FAWLEY.
1st Quarter	...	...	33	18	22
2nd „	...	...	16	12	9
3rd „	...	...	23	13	10
4th „	...	...	24	11	8
			<hr/> 96	<hr/> 54	<hr/> 49

DEATHS FROM ALL CAUSES AT VARIOUS AGE PERIODS :—

				ELING.	LYNDHURST.	FAWLEY.	TOTAL.
Under 1 year ...	...	10	8	6	24	
1 year and under 5	...	8	2	2	12		
5 years „ 15	...	3	2	1	6		
15 „ „ 25	...	5	2	1	8		
25 „ „ 65	...	30	19	16	65		
65 „ and upwards	...	40	21	23	84		
		<hr/>	<hr/>	<hr/>	<hr/>		
		96	54	49	199		

This table shows a death rate between birth and 15 years of age of 2·95 per 1000 ; between 15 years and 65 years of age, 4·94 per 1000 ; and over 65 years of age 5·76 per 1000.

The following Table IV. issued by the Local Government Board will show the various causes of deaths during the year 1900.

TABLE IV.

Causes of, and Ages at, Death during Year 1900.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							DEATHS IN LOCALITIES (at all ages).			Deaths in Public Institutions.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards	Eling.	Lyndhurst.	Fawley.	
Measles	2	1	1	...	...	...	...	2	...	...	...
Scarlet fever ...	1	...	1	...	...	...	..	...	...	1	..
Diphtheria and membranous croup ...	1	...	...	1	...	...	...	1	...	...	...
Fever—Enteric ...	1	...	...	...	...	1	...	...	...	1	...
Diarrhoea (see notes at back)	1	...	...	...	...	...	1	...	1	...	...
Enteritis (see notes at back)	3	1	1	...	...	...	1	3	...	...	...
Phthisis	14	...	...	...	3	9	2	6	5	3	...
Other tubercular diseases	10	3	3	...	1	3	...	4	6	...	...
Cancer, malignant disease	11	...	...	...	..	6	5	6	4	1	...
Bronchitis	18	4	1	1	...	2	10	9	4	5	...
Pneumonia	14	...	2	1	...	4	7	7	4	3	...
Pleurisy	1	...	...	...	...	1	...	...	...	1	...
Alcoholism ...) Cirrhosis of liver)	3	...	...	...	...	3	...	1	1	1	...
Premature birth ...	6	6	...	...	...	...	...	2	2	2	...
Heart diseases ...	23	...	...	1	...	10	12	9	5	9	...
Accidents	1	...	...	...	1	...	...	...	...	1	...
Senile decay	26	...	...	...	...	...	26	13	4	9	8
Influenza	14	...	1	1	2	5	5	5	8	1	...
Nephritis	9	...	...	...	...	5	4	7	...	2	...
All other causes ...	40	9	2	1	1	16	11	21	10	9	...
All causes	199	24	12	6	8	65	84	96	54	49	8

See notes at back.

NOTES.—(a) The deaths of residents occurring beyond the limits of the district are to be included in this table, and deaths of non-residents occurring in the district are to be excluded. See note on Table I. as to meaning of “Residents” and “Non-residents.”

(b) Deaths of residents occurring in public institutions are to be allotted to the respective localities according to the addresses of the deceased as given by the Registrars, and, in addition, to be classified under “Public Institutions.”

(c) Under the heading of “Diarrhœa” are to be included deaths certified as from diarrhœa, alone or in combination with some other cause of ill-defined nature; and also deaths certified as from

Epidemic enteritis;
Zymotic enteritis;
Epidemic diarrhœa. Summer diarrhœa;
Dysentery and dysenteric diarrhœa;
Choleraic diarrhœa, cholera, cholera nostras (in the absence of Asiatic cholera).

Under the heading of “Enteritis” are to be included those certified as from Gastro-enteritis, Muco-enteritis and Gastric catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, especially those of infants, under the specific term “Diarrhœa.”

Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.

In recording the facts under the various headings of Tables I., II., III. and IV., attention has been given to the notes on the Tables.

HENRY A. SHEPPARD,

Medical Officer of Health.

February 6th, 1901.

DEATHS FROM ZYMOTIC DISEASES.

			ELING.	LYNDHURST.	FAWLEY.	TOTAL.
Small Pox	...	...	0	0	0	0
Measles	...	...	2	0	0	2
Scarlet Fever	...	...	0	0	1	1
Diphtheria	...	...	1	0	0	1
Whooping Cough	...	...	0	0	0	0
Enteric Fever	...	...	0	0	1	1
Diarrhoea	...	...	0	1	0	1
Other Zymotic Diseases...			0	0	0	0
			<u>3</u>	<u>1</u>	<u>2</u>	<u>6</u>

INFANTILE MORTALITY.

The Infantile Mortality or death of Infants under one year amounted to 24, and would represent 67·41 deaths in a 1000 births registered during the year. This death rate is exceedingly small when compared with the Infantile death rate of England and Wales for the same period, which amounted to 154 per 1000.

These 24 deaths were due to the following Diseases :—

Bronchitis	...	...	...	4
Debility from Birth		...	...	8
Measles	...	...	...	1
Convulsions	...	...	...	7
Tuberculosis	...	...	...	3
Morbus Coeruleus		...	...	1
				<u>24</u>

BIRTHS AND BIRTH RATES.

The following births were registered in 1900 :—

			MALES.	FEMALES.	TOTAL.
Eling	...	...	86	69	155
Lyndhurst	...	...	39	45	84
Fawley	...	...	61	56	117
			<u>186</u>	<u>170</u>	<u>356</u>

This gives a Birth rate for Eling of 22·92 per 1000.

For Lyndhurst, 22·92 per 1000.

For Fawley, 28·29 per 1000.

For the whole District the rate was 24·45 per 1000.

TABLE I.
For Whole District.

YEAR	Population estimated to Middle of each Year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.		DEATHS IN PUBLIC INSTITUTIONS	Deaths of Non-residents registered in District.	Deaths of Residents registered beyond District.	DEATHS AT ALL AGES. NETT.	
		Number.	Rate.*	Number.	Rate per 1,000 Births registered.	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
1890.	14650	361	24·64	32	88·64	195	13·31	7				
1891.	13907	389	27·97	35	89·99	226	16·25	9				
1892.	14013	345	24·61	30	77·12	239	17·05	14				
1893.	14060	400	28·44	36	90·00	207	14·72	10	No Record kept.	No Record kept.		
1894.	14177	361	25·46	40	110·80	200	14·10	16				
1895.	14250	374	26·31	30	80·21	208	14·59	12				
1896.	14340	382	26·63	24	62·82	180	12·55	8				
1897.	14400	321	22·29	23	71·65	182	12·64	6				
1898.	14500	368	25·37	38	103·26	175	12·06	4				
1899.	14540	332	22·83	36	108·43	221	15·19	10				
Averages for years 1890-'99.	14283·7	363·3	25·45	32·1	88·4	203·3	14·24	9·6				
1900.	14560	356	25·45	24	67·41	199	13·66	8				

* Rates calculated per 1000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of illness, and dying there; and by the term “Residents” is meant persons who have been taken out of the district on account of illness, and have died elsewhere.

Area of District in acres (exclusive of area covered by water)	...	64,272	
Total population at all ages	...	13,907	} At Census of 1891.
Number of inhabited houses	...	2,808	
Average number of persons per house	...	4·9	

It will be noticed in this table that columns 10, 11, 12 and 13 are not filled in. The columns 12 and 13 can only be filled in by the completion of columns 10 and 11.

The Registrars supplied me with their death registers ; but the information required for columns 10 and 11 could not be obtained from them. I then made application to the Registrars and Superintending Registrar for the information, and was informed that the information required could not possibly be given, as no account had been taken whether the dead person was a resident or non-resident. It would, of course, be possible to pick out one or two non-residents who died in the district, but for statistical purposes this would be useless. I have therefore left the columns empty, and have asked the Registrars to record these cases during the present year.

TABLE II.

YEAR.	ELING.				LYNDHURST.				FAWLEY.			
	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
1890 ..	7050	172	96	22	3500	80	40	3	4100	109	59	7
1891...	6409	178	124	15	3530	103	46	8	3968	108	56	12
1892...	6460	171	120	9	3554	76	52	9	3999	98	67	12
1893...	6490	190	103	21	3560	94	45	8	4010	116	59	7
1894...	6535	172	98	20	3602	86	39	7	4040	103	63	13
1895...	6570	186	110	19	3610	75	45	3	4070	113	53	8
1896...	6620	193	87	13	3630	84	48	4	4090	105	45	7
1897...	6660	156	90	16	3640	80	41	3	4100	85	51	6
1898...	6730	174	83	20	3650	91	40	11	4120	103	52	7
1899...	6750	170	120	18	3660	79	57	6	4130	83	44	12
Aver- ages of years 1890 to 1899.	6627·4	176·2	103·1	17·3	3593·6	84·8	45·3	6·2	4062·7	102·3	54·9	9·1
1900...	6760	155	96	10	3665	84	54	8	4135	117	49	6

TABLE III.

Cases of Infectious Disease notified during the Year 1900.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.		
	At all Ages.	At Ages—Years.				1	2	3		
		1 to 5.	5 to 15.	15 to 25.	25 to 65.	Eling.	Lyndhurst	Fawley.		
Small-pox... ..	...	...	...	...	...	...	...	...	...
Cholera ... ..	...	...	...	...	...	...	...	...	...
Diphtheria	1	...	1	...	...	1	...	...	...
Membranous croup	...	...	...	...	...	...	...	...	...
Erysipelas	4	...	...	...	4	1	1	2	
Scarlet fever	27	5	17	1	4	...	...	27	
Typhus fever ... ..	...	...	...	..	...	...	...	...
Enteric fever	1	...	...	...	1	...	...	1	
Relapsing fever ... ..	...	...	...	...	...	...	...	...
Continued fever ... ..	...	...	...	...	...	...	...	...
Puerperal fever ... ..	...	...	...	...	...	...	...	...
Plague ... ..	..	...	...	...	...	...	...	...
Totals	33	5	18	1	9	2	1	30		

GENERAL GEOLOGICAL CHARACTER OF THE NEW FOREST.

The geology of the District and the New Forest in general is composed throughout of the middle-eocene, the Osborne and Headon Beds capping the central portion with their fluvio-marine formations. The Upper Bagshot develops itself below them, and is succeeded by the Barton clays, so well exposed on the coast, and finally by the Bracklesham Beds, which crop out in the valley of Canterton, tending in a south-easterly direction to Dibden.

A coast selection will give one a general statigraphical idea of the whole of the New Forest.

On the surface we find ferruginous flint gravel interstratified with sand varying from a few feet to twenty feet, then light blue marl, running into sand, beneath this a ligneous bed, then follows a bluish marl running into shades of light grey, caused by the broken shelly matter it contains, then a second ligneous bed ; under this we find green marl, limestone, lignite, a second layer of green marl, grey sand, the lower portion of which teems with fish scales, teeth, crocodile plates, ophidian, vertebræ, seed vessels, and other vegetable matter. Underneath this is tough brown clay, corporlite bed, sand bed, light blue marl, grey sand and leaf bed. A general summary therefore of the geological formations of the New Forest consist of—

- (1) Gravel (various).
- (2) Marl (blue and green).
- (3) Ligneous.
- (4) Limestone.
- (5) Lignite.
- (6) Sand (various coloured).

With regard to the physical features and general character of the District, I cannot do better than quote the following from “Wise,” on the New Forest.

“The District is situated on the middle-eocene, and presents some of the best features of the tertiary formation. Its hills may not be high, but they nowhere sink into tameness, whilst in certain portions, they resemble in degree, with their treeless, rounded forms shaggy with heath, and the rough sedge of the fern, parts of the half-mountainous scenery near the Fifeshire Lomonds.

“On the sea coast, near Milton, rise high gravel-capped cliffs, with a basis of Barton clay, cleft by deep ravines, locally known as bunnies. Inland, valleys open out, dipping between low hills, whilst masses of beech and oak darken the plains. Here and there, marking the swamps, gleam white patches of cotton grass, whilst round them on the uplands, spread long unbroken stretches of purple heather, and wide spaces of fern, an English Brabant, studded with hollies and yews, some of them as old as the Conquest. Here and there, too, as at Fritham, small farmsteads show their scanty crops of corn, or as at Alum Green and Queen’s North, green lawns pierce and separate the woods, pastured by herds of cattle, with forest pools white with buckbean, and the little milkwort waving its blue heath on the banks.”

HOUSE ACCOMMODATION.

The house accommodation in this District is ample, as shown in a previous portion of this report. In the denser portions of the District the houses are for the most part built of brick, either single, semi-detached or in rows, with tiled or slated roofs. The accommodation in the several villages for the working class is for the most part good, with a sufficiency in all cases of open spaces about all the houses and with cleanly surroundings.

The isolated houses in the less dense portions of the District are for the most part built of mud walls with thatched roofs, and where proper precautions are taken to drain off all storm water, are dry and comfortable.

There is no Bye-law in the District which gives one any supervision over the structural arrangements of new erections.

SEWERAGE AND DRAINAGE.

Only a partial system of Drainage exists in Totton, Lyndhurst, Hythe and Beaulieu of this Sanitary District. In

TOTTON

the drain extends the length of the two principal streets and is formed of glazed pipes; these drains are intended to carry off the storm water, and they discharge themselves into the tidal water. The

sewage in this locality does not enter these drains, but each house has to provide its own accommodation, consequently we have the open cesspit, dead well and earth closets to take the place of a proper system of Sewerage. I am however pleased to say that many householders are adopting the earth closet system in place of the open cesspit. Totton is situated at a low level and a thorough Sewerage System would be both difficult and expensive ; but I feel it my duty to suggest to the Board that a proper system of sewerage should be instituted ; all the houses should be drained into main sewers, which might be conducted to the Salt Marsh, where a pumping station could be erected, and receiving tanks made.

LYNDHURST.

The drainage here, although by no means perfect, is the best drained portion of the Sanitary District. Here we have two main drains, one placed on the North and the other on the South of the village. These drains receive the sewage from the houses in their immediate vicinity, and is conducted to tanks situated outside the village. The house drains connected with the main drain are trapped and quite efficient. There is however much of Lyndhurst that might be properly and easily drained, owing to its physical features ; but unfortunately the difficulty of obtaining land, for the building of tanks suitable of accommodating all the sewage of the village, will for the present stand in the way of a thorough system of sewerage for Lyndhurst. Those houses unconnected with the main drain adopt dead wells, the earth closet or open cess-pit. The present tanks are emptied once every week, and the sewage is used for fertilization purposes.

HYTHE.

The main sewer here, which is constructed of brick and about 12 inches in diameter, is situated in the centre of the village, and is little more than a covered-in waterway leading from the higher portions of Hythe to the Southampton Water. It has a hatch at its inlet and a tidal flap at the outlet. Into this drain the overflow from the cesspools in its immediate vicinity runs, and is washed away by the stored water above the hatch at certain periods of the day, according to the state of the tide. There are two other drains on the south-east of the village

which conduct the overflow from houses situated there, into the Southampton Water. The other portion of the village adopt open cesspits, dead wells or earth closets.

BEAULIEU.

There is a drain here which is only used for storm water, and discharges itself into the Beaulieu River. The sewage is received into dead wells or open cesspits, and a few of the houses have adopted earth closets.

With regard to the rest of the district, the open cesspit is almost universal.

The Board should consider the advisability of adopting for the whole district either a water carriage system or one of the dry systems. For the most populous portions a water carriage system could be adopted; and for the outlying portions a dry system. I have urged this in my previous reports, and again bring it to the notice of the Board, as our present arrangements are far from satisfactory.

EXCREMENT DISPOSAL.

In the populous centres of this district the disposal of excrement and sewage is done by means of night carts, which convey it to adjoining farms, where it is mixed with earth and used for fertilizing the ground. In the other portions of the district it is used in the same manner by the occupier to fertilize his own garden. This system when carried out properly has much to recommend it, but at the same time it must be borne in mind that under this system the Sanitary Authority are more or less at the mercy of the householder, as the contents of the dead well or middens in some cases are allowed to accumulate until they become a nuisance and dangerous to the public health.

I might point out to the Board that this system or any other system is defective as long as there is no supervision exercised by the Board. I would suggest that Inspectors be appointed in each of the Parishes, whose duties it would be to see that all receptacles for excrement be cleaned out at least once every month.

It would simplify the matter greatly if the Board would adopt any one of my two suggestions mentioned under Sewerage and Drainage.

In the outlying districts one of the most common sanitary defects is the want of a proper method of disposal of slop waters. These are often thrown into an open trench dug in the soft soil and probably with no fall, so that in time holes are worn in the trench, and remain filled with this foul smelling liquid. This is usually remedied by re-digging the trench; but I would recommend that in all these cases the owner of the property should be compelled to drain off slop waters by means of glazed half-pipes, which should empty themselves upon grass land some considerable distance from the house or houses.

With regard to house refuse, this is usually destroyed by fire by the occupier.

WATER SUPPLY.

Portions of the Eling and Lyndhurst divisions are supplied by the South Hants Water Works Company. The water is of great purity and the supply abundant, and each year since it has been laid on, more and more houses have taken it in preference to using their own well water. It is now an understood thing that all new houses must adopt this water supply. The source of this water supply is in the chalk, and is drawn from wells and headings from 80 to 100 feet in depth. The pumping stations are at Timsbury in the Valley of the Test, and at Hazeley Down, Twyford, in the Valley of the Itchen. Duplicate mains and reservoirs are provided as far as possible throughout the system, so that a constant supply is maintained.

At the present time 334 houses are supplied at Totton and Eling, and 185 at Lyndhurst, making a total of 519.

The analysis of this water as given by Messrs. Ogston & Moore, of Lime Street, London, is as follows :—

Sample of water taken from the Timsbury Well, and from the Settling Tank :

SETTLING TANK.				WELL.
Total Solids (in grains per gallon) ...			16·8	28·03
<i>containing—</i>				
Chlorine ...	...	...	1·35	1·35
Sulphuric Acid ...	...	...	·60	·57
Nitric Acid ...	...	...	·65	·65
Lime ...	...	...	5·18	10·36
Magnesia ...	...	...	·50	·50
Total Hardness ...	...	...	10·5	18·6
Permanent Hardness ...	...	...	4·6	4·6
Free Ammonia ...	...	...	nil	trace
Albuminoids ...	...	...	·015	·019
				parts per million.
Appearance in 2-feet tube ...			bright.	bright.

The water supply in the remaining portions of Eling and Lyndhurst is obtained from shallow wells, springs, and upland surface water ; but I hope in the near future to be able to record the fact that all houses in proximity to the water mains have taken the South Hants Water.

In the Fawley Division beyond the village pumps there is no regular water supply ; and the water used is obtained from shallow wells, springs, and upland surface water. The springs in all cases give a good and wholesome supply ; the wells, however, are risky, in many cases owing to their being sunk too near pig stys, middens, or neglect in providing efficient means to keep out storm water. During the year 1900 I have not had to condemn any water as being unfit.

METHOD OF DEALING WITH INFECTIOUS DISEASES.

In dealing with these diseases in this Report I shall confine myself to those diseases enumerated in the Infectious Diseases Notification Act, 1889, viz., Small Pox, Cholera, Diphtheria, Membranous Croup, Erysipelas, Scarlatina or Scarlet Fever, Typhus, Typhoid, Enteric, Relapsing,

Continued and Puerperal Fevers. Upon receipt of a Notification of any of the above diseases I forward at once to the head of the family two notices, a copy of which I now give :—

NEW FOREST SANITARY AUTHORITY.

LEGAL RESPONSIBILITIES IN REGARD TO INFECTIOUS DISEASES.

To Parents, Guardians, and others having charge of Persons while
suffering from Infectious Diseases.

NOTICE.

PART I.

It is desirable that the contents of this Circular should receive strict attention by all Parents, Guardians, Householders, Occupiers, and others having charge of any child or person suffering from Infectious Disease.

Various Acts of Parliament have been passed during the past few years imposing penalties upon persons infringing the same, as the following details will show :—

(a) Definition of Infectious Disease.

The Infectious Disease (Notification) Act, 1889, specifies the following Diseases shall be considered to be Infectious Diseases :—

Small Pox.

Scarlet Fever or Scarlatina.

Cholera.

Diphtheria.

Membranous Croup.

Typhoid Fever.

Puerperal Fever.

Typhus Fever.

(b) Notification of Infectious Disease to the Medical Officer of Health.

The Medical Attendant is compelled to notify the existence of any case of Infectious Disease he is attending, to the Medical Officer of Health.

(c) Notifications by Parents, Guardians, &c.

The Notification by the Medical Officer does not relieve the Parents, Guardians, or other persons having charge of anyone suffering from an

Infectious Disease, from the duty of also notifying forthwith to the Medical Officer of Health at Totton, Southampton, the fact that a person under their charge is suffering from one of the Diseases above mentioned.

It is no excuse to say that a Doctor has not been called in to see the Patient.

Every person who fails to give notice to the Medical Officer of Health is liable to a penalty of FORTY SHILLINGS.

(d) Penalty for the Exposure of Persons suffering from an Infectious Disease, or the Exposure of Infected Articles.

Acts of Parliament : The Public Health Act, 1857, and the Infectious Disease (Prevention) Act, provide penalties for offences as under ;

Any person who, while suffering from any dangerous infectious disease wilfully exposes himself in any public place, inn, shop, or tramcar, cab, omnibus, train, or other public conveyance, shall be liable to a penalty of FIVE POUNDS.

Any person who being in charge of a person so suffering and exposes him in any public place or conveyance, as above-mentioned, shall be liable to a penalty of FIVE POUNDS.

(e) Exposure of Infected Clothing or other Articles.

Any person who gives, lends, sells, transmits, or exposes, any bedding, clothing, rags, or other articles, which have been exposed to infection before having the same thoroughly disinfected shall be liable to a penalty of FIVE POUNDS.

(f) Laundry.

Any person sending from an infected house any wearing apparel, clothing, bedding, or linen, &c., used by a person suffering from an infectious disease, to any laundry or other place, shall be liable to a penalty of FIVE POUNDS.

(g) Milk Cans.

No milk cases from a dairy shall be left at or in an infected house. House-holders returning infected milk cans may cause serious danger, and incur a penalty of FIVE POUNDS.

(h) Letting of Infected Lodgings.

Any person who knowingly lets any house, room, or part of a house, in which any person has been suffering from any dangerous infectious

disease, without having such house, room, or part of such house, and all articles therein liable to retain infection, properly disinfected, shall be liable to a penalty of Twenty Pounds.

This provision applies to Hotels receiving guests.

(i) Disinfection of Bedding, &c.

It is requested that on the complete recovery of the patient or his removal to Hospital, the Parents or Guardians will hand over to an Officer of the Health Authority all articles of bedding, clothing, carpets, curtains, or other articles which have been exposed to infection, for the purposes of removal and disinfection.

The disinfection will be carried out by the Local Authority, and the articles returned free of charge.

Any person who fails to comply with this requirement is liable to a penalty of TEN POUNDS.

(j) Casting Infectious Rubbish into Dust Bins.

Any person who shall knowingly cast, or cause, or permit to be cast, into an ash-pit, ash-tub, or other receptacle for the deposit of refuse matter, any infectious rubbish without previous disinfection, shall be guilty of an offence under this Act. Penalty—FIVE POUNDS.

(k) Penalty on Lodger or Tenant for concealing existence of Infectious Disease.

Every person who shall cease to occupy any house, room, or part of a house in which any person has within six weeks previously been suffering from any infectious disease without having such house, room, or part of a house, and all articles therein liable to retain infection, disinfected to the satisfaction of a registered medical practitioner, as testified by a certificate signed by him, or without first giving to the owner of such room, or part of a house, notice of the previous existence of such disease, and every person ceasing to occupy any house, room or part of a house, and who on being questioned by the owner thereof, or by any person negotiating for the hire of such house, room or part of a house, as to the fact of there having within six weeks previously been therein any person suffering from any infectious disease, knowingly makes a false answer to such question, shall be liable to a penalty not exceeding TEN POUNDS.

(l) **Legal Penalties for Making, Cleaning, or Repairing Wearing Apparel in an Infected House.**

The Factory and Workshops Act, 1895, provides : Where any occupier causes or allows wearing apparel to be made, cleaned, or repaired, in any dwelling-house or building occupied as a dwelling-house, while an inmate of the dwelling-house is suffering from Scarlet Fever or Small-Pox, he shall be liable to a penalty of TEN POUNDS.

This applies to wearing apparel belonging to persons other than the occupier, and is intended to prevent dressmaking, tailoring, laundry work, &c., being carried on in an infected dwelling-house or premises connected therewith, thereby securing the public from the risk of infection.

(m) **Obstruction of Officers of Local Authority in the execution of Duties provided by the Act.**

Every person who shall wilfully obstruct any Officers of the Local Authority in the execution of his duties shall be liable to a penalty of FIVE POUNDS, and FORTY SHILLINGS for every day the offence continues.

PART II.

(n) **Precautions against the Spread of Infection by Schools, &c.**

The following recommendations and orders should be strictly attended to :—

(o) **School Attendances.**

The following rules must be attended to by parents, guardians, school managers, and others :—

No children may be permitted to attend any school or public place who reside in any house in which there exists a case of infectious sickness, until all risks of their carrying infection has ceased, and the premises have been thoroughly disinfected and notice given thereof by the Health Authority to the various school managers or teachers.

The exclusion from schools of convalescent but infectious persons, or children from houses in which infectious disease exists, is of the greatest importance in preventing an epidemic. Any person having knowledge that such children are attending schools or public places, should, in the public interest, inform the Health Authority.

The term "SCHOOL" includes all Public, Private, Church, and Sunday Schools.

The period of exclusion advised to school managers varies with the nature of the disease. The following rules, which experience proves necessary, are those which must guide persons having charge, not only of persons suffering from an infectious disease, but of persons residing in an infected house :—

(p) **Scarlet Fever.**

A child who has been suffering from Scarlet Fever or Scarlatina, should not be readmitted to school for at least seven or eight weeks after the occurrence of the disease. Where a case is not removed to Hospital, persons attending the patient and children residing in the infected house, although not themselves suffering from scarlet fever, are liable to spread the disease by means of their clothing. On this account they also must be kept from school and from mixing with the public, or exposure in public places. On removal of the case to Hospital, should the other children show no signs of the disease within ten or fourteen days, they may be readmitted to School.

(q) **Diphtheria.**

No children shall attend from the infected house for at least five weeks after the occurrence of the last case.

(r) **Measles.**

Three weeks at least must elapse from the occurrence of the last case.

(s) **Small Pox.**

Same period as Scarlet Fever, viz., six to eight weeks.

(t) **Typhoid Fever.**

A period of four weeks' exclusion.

(u) **Puerperal Fever.**

Persons attending these cases will require special precautions, which will be given in individual cases.

HENRY A. SHEPPARD,

Medical Officer of Health.

Totton, Southampton.

NEW FOREST SANITARY AUTHORITY.

INFECTIOUS DISEASE (PREVENTION) ACT.

Name of Occupier _____*Situation of House* _____*Disease* _____

The Medical Officer requests that he may be informed when the last case has recovered, in order that directions may be given for the disinfection of the rooms occupied by the Patient.

This form should be signed by the Medical Attendant in the space below.

I hereby certify that in my opinion the Patient at the above address has entirely recovered from infectious illness, and that the rooms lately occupied by _____ are ready for disinfection.

Signed _____*Medical Attendant.**Date* _____ *1* _____

Should the case be of a dangerous infective nature, I interview the father or the head of the family within the next 24 hours, previously having notified the Sanitary Inspector to supply disinfectants. I see that the case is properly isolated and give instructions as to the use of the disinfectants. I then make it my business to enquire into the cause of the disease, and in making my investigation I follow out the lines laid down according to the disease under consideration.

Sometimes the result of the investigation is nil, or only presumptive, which frequently happens in sporadic cases of Scarlet Fever. At other times a definite cause is found, and when that is the case it is remedied.

With regard to the rest of the inmates of the infected house, should they be school children, they are kept from school, and the grown-up members of the same family are warned not to mix with the rest of the inhabitants.

At the termination of the disease, when the second certificate is returned to me, I give instructions to the Sanitary Inspector to disinfect the house and bedding with Sulphurous Dioxide. In some dangerous

cases the bedding is destroyed by fire and a new supply given by the Sanitary Authority ; in other cases the bedding is sent to the Disinfecting Chamber at Southampton and returned to the owner properly disinfected.

NOTIFICATION.

This Act came into force on Nov. 1st, 1893, and during the year 1900 I received 33 Notifications, made up of the following diseases :—

Diphtheria	...	...	...	1
Erysipelas	...	...	...	4
Scarlet Fever	..	...	...	27
Enteric Fever	...	...	...	1
				<hr/> 33 <hr/>

These were all treated in the manner described above, and considering the extent of the Sanitary District the number of Infectious cases must be looked upon as being very small.

ISOLATION HOSPITAL.

The Isolation Hospital adopted by the New Forest Sanitary Authority belongs to the County of Southampton. It is situated at Mousehole, a suburb of Shirley and about $2\frac{1}{2}$ miles from the New Forest Sanitary District. It is an extensive building, capable of holding 72 adult patients, and is built in five blocks, with ample administrative accommodation and supervision. In 1895 I pointed out to my Board the advisability of having an isolation hospital for the district, enclosing plans and other information, but after mature consideration on their part, and the difficulty of finding a suitable site, it was resolved to abandon the idea.

The Authorities in Southampton were asked if they could accommodate us with regard to Infective cases ; and although their accommodation was much smaller than at present they acceded to the request of the New Forest Sanitary Authority, and would take in any of our cases at a charge of £2 weekly for each case. This arrangement has been ratified with regard to the New Isolation Hospital ; and at any time that we might wish to make use of the Hospital, a proper conveyance will be sent from Southampton to any part of our district, and the patient removed in comfort and safety.

DISINFECTION.

Up to the present time the rooms occupied by Infective patients have been disinfected with sulphur fumes or sulphur dioxide alone, with ordinary cleansing with carbolic soap afterwards ; but in the future I would recommend that 3-lbs. of sulphur, moistened with methylated spirit, be used for each 1,000 cubic feet of space in the room ; or, if preferred under certain circumstances, $1\frac{1}{2}$ -lbs. of chloride of lime, with 6-oz. of strong sulphuric acid added, for same space ; room or rooms to be sealed up for 12 hours, and ventilation for 24 hours afterwards ; then all walls stripped of paper, and walls, ceiling and woodwork washed with a solution of perchloride of mercury of a strength of 1 in 5,000

Such a solution could be made and kept in stock at a very small outlay by dissolving $\frac{1}{2}$ -oz. of perchloride of Mercury in 1-oz. of hydrochloric acid and 3 gallons of water, which would represent a strength of 1 in 1,000. A portion of this could be reduced by four times the quantity of water to make it 1 in 5,000.

A portion of the original solution could be reserved for flushing out all closets and sinks connected with the house.

Soft articles of furniture to be disinfected by heat.

Disinfectants can be obtained from the following persons :—

THE SANITARY INSPECTOR, Testwood Lane, Totton.

S. DIXON, Fisher's Road, Totton.

B. M. BOWDITCH, Dibden Heath.

F. GAILER, Minstead.

INSPECTION OF THE DISTRICT.

I have made three inspections of the district during the year. These inspections cannot be termed systematic inspections, as laid down by the Local Government Board, but have been made with a view of informing my Board as to the general health of the district. In these inspections I am greatly indebted to the resident medical gentlemen for the information they afford me ; and should they point out anything threatening the public health, it would at once be attended to and rectified without delay. On these occasions I have visited cow-sheds, slaughter-houses, bakehouses and dairies, with a view to over-crowding and cleanliness ; and any suggestion which I have made with regard to these matters has been promptly attended to by the owner or occupier.

FOOD AND DRUGS ACT.

I have had no cases brought to my notice during the year 1900 with regard to the examination of any article of food to which the provisions of the Public Health Act 1875 apply.

ZYMOTIC AND OTHER DISEASES.

As will be seen from Table III., wherein are shown the principal Zymotic diseases, and which are of a notifiable nature, only 33 cases occurred throughout the whole district, 2 being in Eling, 1 in Lyndhurst, and 30 in the Fawley division. These 33 cases are made up of the following diseases:—

Diphtheria	...	...	...	...	1
Erysipelas	...	...	...	...	4
Scarlet Fever	...	...	...	...	27
Enteric Fever	...	...	...	...	1

DIPHTHERIA.

This single case of Diphtheria occurred in the Eling Division, and was notified after death. The patient was one of a large family, had not been away from home, was not attending school, and apparently had no means of contracting the disease. The milk supply was from their own cow, and the water supply good. There were no sickly animals about the house, and the house itself was in a good sanitary condition. With this evidence before me I failed to find a cause for the disease. However, proper sanitary precautions were taken, and there was no spread of the disease.

ERYSIPELAS.

These four cases were of idiopathic origin and gave no trouble. There were no deaths from this disease.

SCARLET FEVER.

All these cases occurred in the Fawley Division, and the greater number of them were located in the village of Hythe, and the other cases in the immediate neighbourhood. This slight epidemic took place in the early part of 1900, at which time there was a considerable amount of scarlet fever in Southampton. Beyond this fact I failed to trace the origin of this disease; but its spread was undoubtedly due to improper exposure of the patient during the period of desquamation. This dis-

regard of orders was reported to the Sanitary Authority, who instituted proceedings when desquamation had ceased, and the person was fined for his indiscretion. There was only one death from this disease.

ENTERIC FEVER.

Only one case of Enteric Fever occurred in the district, and that took place at Hill Top, Fawley. The case proved fatal, and was caused by insanitary surroundings. The insanitary state was remedied.

MEASLES.

This disease was prevalent in Totton and Woodlands during the month of June, and resulted in two deaths. Towards the end of December a few cases occurred at Cadnam with no mortality. In all these cases, although not being a notifiable disease, I endeavoured to have them isolated and the remaining members of the family kept from school. The epidemics taking place near the summer and Christmas holidays, I had the schools in each district disinfected.

MORTALITY FROM ZYMOTIC DISEASES FOR THE PAST 10 YEARS.

			1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
Measles	...	...	6	0	3	1	0	0	1	4	1	2
Whooping Cough	...	...	5	5	0	5	2	1	4	0	1	0
Diarrhœa	...	...	1	2	1	1	5	2	3	5	8	1
Typhoid	...	...	0	0	4	1	1	2	1	0	0	1
Small Pox	...	...	0	0	0	0	0	0	0	0	0	0
Scarlatina	...	...	0	0	0	0	0	1	2	0	0	1
Diphtheria	...	...	0	3	1	15	0	5	4	1	0	1
Croup	...	...	0	1	1	1	0	0	1	0	0	0
Typhus	...	...	0	0	0	0	0	0	0	0	0	0
Erysipelas	...	...	0	0	0	0	0	2	1	0	0	0
			—	—	—	—	—	—	—	—	—	—
Total	...		12	11	10	24	8	13	17	10	10	6

The mortality for Zymotic diseases during 1900 amounts to 0·41 per 1000 of the estimated population.

DISEASES OF THE RESPIRATORY SYSTEM.

BRONCHITIS, PNEUMONIA, PLEURISY AND PHTHISIS.

Forty-seven deaths were due to these diseases, Phthisis being accountable for 14 ; Bronchitis, 18 ; Pneumonia, 14 ; and Pleurisy, 1. These diseases are common in all districts, whether rural or urban ; and I do not think this district favours the production of these diseases more than any other rural district.

DISEASES OF THE CIRCULATORY SYSTEM.

Twenty-three deaths were registered in the whole district as being due to Heart Disease. These, with one exception, were all registered between the ages of 25 and over 65 years. The deaths from this disease vary very slightly year by year, and I consider it a fair average for a rural district with our present population.

PLUMBISM.

This is a disease which is very prevalent at certain portions of the year, the beginning of the winter season being the most favoured. This disease in 99 cases out of 100 is produced by the consumption of the various home-made fruit wines, and the so-called herb beer. The productions are made in glazed earthenware pans, with the result that the acid of the mixture dissolves the lead glazed coating, which remains in solution in the finished article. In all cases which come under my notice, I ask that the article may be destroyed, and instruct them to make their wines in future in wooden tubs.

With the above exception, I cannot claim for the district any special distinction in showing a marked preference for any of the other diseases ; and taken on the whole, the district may be looked upon as a very healthy one.

MATTERS WHICH SHOULD BE CONSIDERED DURING
THE PRESENT YEAR.

- (1) A definite system of drainage :—
 - (a) Either a water carriage system, or
 - (b) One of the dry systems.
- (2) Systematic scavengering the roads, and removal and disposal of house refuse by public scavengers.
- (3) The formation of a greater number of stations in the district where a supply of disinfectants can be obtained.
- (4) More extended power over the erection of new houses.
- (5) A system of bye-laws suitable for a rural district.
- (6) The adoption of the Food and Drugs Act.
- (7) The adoption of the Infectious Disease (Prevention) Act.
- (8) Proper supervision over lodging-houses, slaughter-houses, bake-houses, dairies, cowsheds and milkshops, factories and workshops, and offensive trades.

Most of these suggestions have been urged by me in my special reports to the Board, and I again bring them to your notice in this my yearly report, trusting that some, if not all, will be adopted during the present year.

COUNTY OF HANTS.

Summary of work done through the Sanitary Inspector in the Rural
Sanitary District of the New Forest, during the year
ending 31st December, 1900.

	Total No. for Year.		Total No. for Year.
Complaints received ...	40	Houses disinfected ...	29
Cottages inspected ...	32	Houses closed ...	—
Lodging-houses inspected ...	1	Houses erected or re-built, for which "Certificates"	
Slaughter-houses inspected...	9	were applied for ...	1
Bakehouses inspected ...	4	"Certificates" granted ...	1
Dairies and Milk-shops inspected ...	4	"Certificates" deferred ...	—
Cowsheds inspected ..	7	Wells sunk or improved sup- plies of water afforded ...	15
Workshops inspected ...	10	Wells cleansed or repaired ...	3
Filthy houses cleansed, sec. 46 Public Health Act, 1875 ...	1	Wells closed ...	—
Overcrowding abated ...	2	Defective pumps repaired, or new pumps erected to existing wells ...	2
Houses placed in habitable repair ...	5		